Correspondence

Preventive Care Screening for Adolescents—What About Substance Abuse Screening?

TO THE EDITOR: The article "Screening in Preventive Care for Adolescents" by Braveman and Toomey in the April issue¹ noted that the major health risks for US adolescents are behavioral. They state that as many as 76% of adolescent deaths in the United States are caused by accidents, homicide and suicide. While we appreciate that they are aware of this phenomenon, it is quite apparent that the screening schedule which is offered as an outline in the text and their discussions related to behavioral history taking and substance abuse are woefully inadequate. In fact, there is no mention on the screening schedule outline of substance abuse or any behavioral questions. There are also no references in the text to lead interested physicians in the direction of how to adequately screen for teenage substance abuse, which is so frequently involved in teenage depression, suicide and accidents. We find this paradoxical, given the authors' statement that "a rational approach to health screening for adolescents would systematically address their most significant risks for morbidity and mortality, not only in youth but also in adulthood."

We would recommend for those primary care physicians interested in focusing on the major causes of morbidity and mortality in adolescents—substance abuse and behavioral disorders—that these areas be noted separately and numbered accordingly under the area of history. Further, for those interested in pursuing practical expertise in chemical dependency, the book *Drugs*, *Drinking and Adolescents*² by Dr Donald Ian MacDonald should be read cover to cover. There are sections in Dr MacDonald's book that deal more directly with diagnosis and intervention as well as other sections on dealing with parent-support groups and school systems.

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Dental Professionals and HIV Infection

To the Editor: In "Absence of HIV Antibody Among Dental Professionals Exposed to Infected Patients" by Flynn and co-workers in the April issue,¹ data were presented to show that dental professionals are at minimal risk of occupationally acquired human immunodeficiency virus (HIV) infection. It is paramount to realize that this report merely adds an additional 255 seronegative dental professionals at risk of infection to 1,078 previously reported but unacknowledged by the authors.²-4

That the authors failed to cite any of the existing published reports on this important topic is distressing since it is vital to present all scientific reports in the perspective of previous published work on the same subject. Although neither substantially new nor unique, this article does serve to corrobo-

rate the reports published by others, further defines the minimal risk of occupational HIV infection to dentists and their employees and reinforces the need for dental professionals at large to rigorously exercise infection control procedures since only a relatively small proportion of the members of this health care provider group has yet been evaluated.

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Hypomagnesemia

To the Editor: "When you hear hoofbeats, you should think of horses, not zebras!" How often have clinical teachers explained to their students and house officers to remember that, indeed, common things occur commonly. Similarly when clinicians detect hypomagnesemia in their patients, they should first consider the possibility of magnesium deficiency and not think of reasons why the hypomagnesemia is insignificant.

Magnesium is the second most abundant intracellular cation and is an essential cofactor in all biological systems involving bioenergetics. To our knowledge, all well-controlled experimental and clinical studies of magnesium depletion, without exception, have been accompanied by hypomagnesemia. While there are times when magnesium deficiency occurs in the presence of a normal serum magnesium level, it is an exception. Hypomagnesemia, in the presence of a normal serum protein concentration, is indicative of magnesium depletion and should be treated.

Clinical magnesium deficiency is a relatively frequent occurrence among in-hospital patients with estimates of hypomagnesemia ranging from 6.9% to 11%. ^{1,2} Concurrent hypomagnesemia among hypokalemic patients has been estimated to be between 38% and 42%. ^{3,4} Hypomagnesemia has also been reported to occur in 23% of hyponatremic patients and 29% of hypophosphatemic patients. ⁵ Patients with commonly occurring illnesses requiring hospital admission are at risk for magnesium depletion and hypomagnesemia: alcoholic patients with or without cirrhosis; patients with congestive heart failure or hypertension who are receiving diuretics, especially the potent loop blockers; patients with chronic obstructive pulmonary disease; patients on prolonged intravenous